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(74) Common Representative: **KONINKLIJKE PHILIPS ELECTRONICS N.V.**; c/o LUNDIN, Thomas, M., 595 Miner Road, Cleveland, OH 44143 (US).

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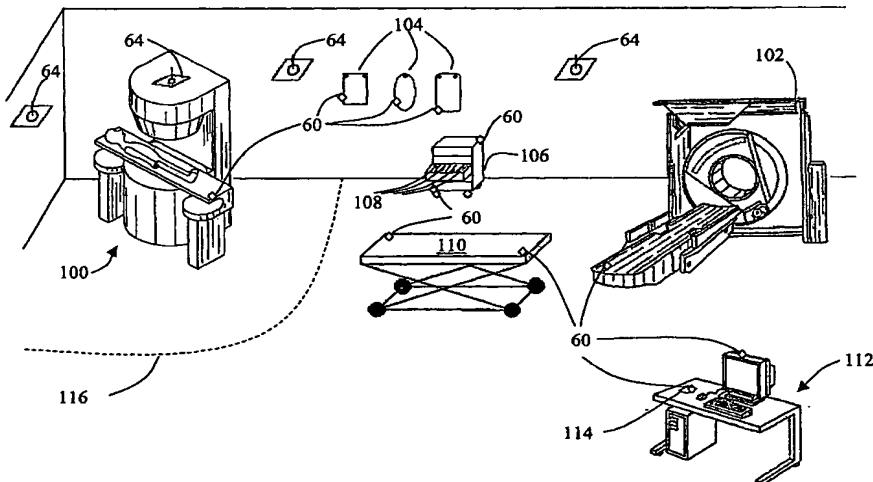
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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]**; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

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(54) Title: MRI SYSTEM WITH WIRELESS IDENTIFICATION CAPABILITY



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(57) **Abstract:** A magnetic resonance apparatus includes a main magnetic field generating assembly (12) located in a magnetic resonance suite generates a substantially spatially constant main magnetic field through at least a portion of a subject in an imaging region. A gradient field generating assembly (16) overlays spatially variant gradient magnetic fields onto the main magnetic field. A radio frequency assembly (22) excites magnetic resonance in dipoles of a subject in the imaging region. A receiver (36) receives magnetic resonance signals from resonating dipoles in the imaging region. Radio frequency transponders (60) are affixed to objects (22, 104, 106, 108, 110, 114) in the magnetic resonance suite. The transponders (60) are interrogated by a reader/writer (62) to determine which coils are in the bore (14) and whether other coils and objects are outside of a safety threshold (116).



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